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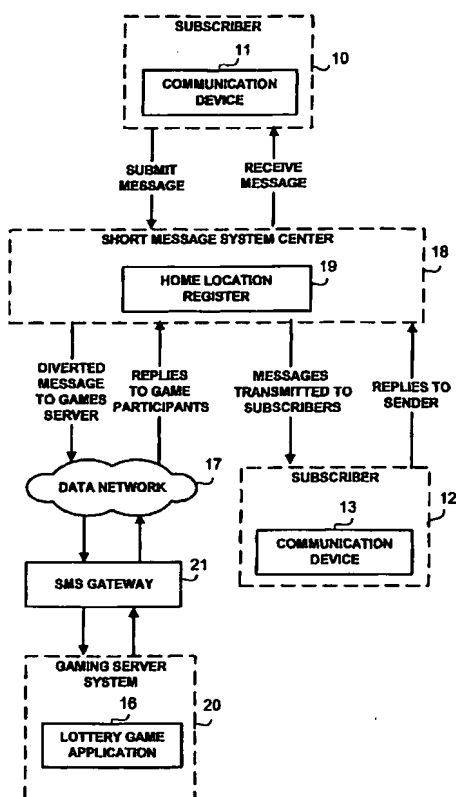
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(54) Title: **METHOD AND SYSTEM FOR THE CONDUCT OF LOTTERY GAMES OVER A TELECOMMUNICATION NETWORK**



(57) Abstract: A method and system in a telecommunication network for the conduct and management of a lottery game. A plurality of users operating appropriate telecommunication devices connect intermittently to a lottery gaming server system implemented on a host platform within a data communication network. The users transmit text messages including bets relating to the lottery game to the server system. The messages are processed, acknowledged and introduced into the lottery game. At predetermined time intervals lottery drawings are performed, the suitable messages are compared to the numbers drawn, and all the participants are notified regarding the conclusive results.



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# METHOD AND SYSTEM FOR THE CONDUCT OF LOTTERY GAMES OVER A TELECOMMUNICATION NETWORK

## BACKGROUND OF THE INVENTION

### 5 FIELD OF THE INVENTION

The present invention relates in general to a method and system for conducting lottery games, and more specifically to the conduct of lottery games over a telecommunication network operative in linking a central gaming server system to participants of the game.

### 10 DISCUSSION OF THE RELATED ART

Public lottery has become widely accepted as an element operative in the support of government activities while providing entertainment, distraction and optimism to the public. Lottery games, which have become increasingly popular in the past years, have a set of simple rules and are organized and managed in a fairly standard fashion. A plurality of participants pays a trivial fee for the privilege of betting on the occurrence of a fortunate coincident. Subsequently, the participants are given the option of selecting a set of numbers from a significantly larger set of numbers. At specific pre-determined time intervals a public drawing is performed which includes the generation and publication of a set of random numbers. The winner (or winners) of the game, as those participants who have selected the numbers correctly for the respective drawing are referred to, typically gain a substantial monetary prize.

The number of participants in one round of a public lottery game tends to be substantial. Commonly millions of people bet on the result of one drawing when a single party might procure a plurality of number-sets in order to increase the chances of winning. To accomplish error-free, secure, and expeditious handling of the accumulated game-related information dedicated computer systems utilizing specifically developed software programs are used to store, to process and to examine the vast amount of betting-related records. The computer

systems are typically accessed via communication lines fed by widely distributed interfacing devices such as specifically manufactured point of sale equipment and other input/display devices. Consequently it is necessary for the general public wishing to participate in the game to employ the services of various intermediaries  
5 who own and/or control the interfaces. It will be easily perceived that the existence of a multitude of point of sales installations and associated personnel running them involves considerable expenditure (thereby reduction of profits) for the organizers of the game and needless inconvenience for the public.

It will be readily understood by those who are skilled in the art that a  
10 novel method and system is needed for the organization and management of the lottery games to make participation easier for the public and to cut expenses for the organizers. The new system and method should provide to the public, willing to participate in the game, a direct, preferably interactive access to the lottery system, and thus allowing the placing of instantaneous bets, the performance of  
15 timely inquiries and the routine reception of notifications on the personal level in regard to the drawings results.

## SUMMARY OF THE PRESENT INVENTION

One aspect of the present invention regards a method for the conduct of open games in a communication network consisting of a plurality of users participating in the game and communicatively connected to a central server system. The method consists the operative steps of establishing specific data files with the communication network wherein specific software routines are maintained, submitting messages containing user-selected values by a plurality of users participating in the game, transmitting the messages initiated by the plurality of users to the central server system, processing the messages from the plurality of users by the particular software routines in conjunction with the specific data files, storing the messages submitted into the specific data files, establishing a random baseline result in regard to a specific game by generating a set of random values across a larger set of predetermined and preset values, and determining a measure of equivalency between the randomly generated set of values and the user-introduced values whereby the messages expressing equivalency to the baseline result will be linked to the set of randomly generated values.

A second aspect of the present invention regards a system for conducting open games across a communication network, which includes a plurality of users participating in the open games. The users communicatively connected to a central gaming server. The system consists of a central gaming server system embedded on a host computer platform for gaming system applications. The server contains a communication device, a storage device utilized for holding particular software modules and associated data files operative in the running of the gaming system, and a gaming server application for the conduct and management of games. The gaming server application consists of a user transaction handling module, a game results handling module, a transaction database, and a game results database.

A third aspect of the present invention regards a method for the conduct of a set of games over a communication network including a plurality of potential participants in the games. The participants are operating various

communication devices across the communication network in order to communicatively connect to a central gaming server system. The method consists of maintaining functional data structures within the communication network wherein operative software routines instituting a gaming server application are implemented, submitting user-initiated messages including values selected as indicative of an assumed result of a specific game by a plurality of participants to the central server. The method further includes delivering user-initiated messages to the central gaming server system via a series of telecommunication networks, processing the messages received from the users by utilizing particular software modules in conjunction with functional data structures, storing the processed messages into specific data structures, substantiating a random baseline result to a specific game by generating a random set of values across a substantially larger set of predetermined and preset values, determining equivalency factors of the set of randomly generated values and the set of user-introduced values, whereby the messages including user-selected values expressing consequential equivalency relationships to the random set of values will be connected by proper symbolic links to the respective set of randomly generated values.

## BRIEF DESCRIPTION OF THE DRAWINGS

The present invention will be best understood and appreciated by reference to the following detailed description of an illustrative embodiment when read in conjunction with the accompanying drawings wherein:

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Fig. 1 is a pictorial representation of a computing and communication environment wherein the method and the system of the present invention can be implemented;

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Fig. 2 depicts a block diagram illustrative of selected components in a telecommunication network in conjunction with components of the present invention which operatively implement the proposed system and method;

15

Fig. 3 is a block diagram illustrative of the server system and the various hardware and software components, operative in the application of the proposed method, contained therein, in accordance with a preferred embodiment of the present invention;

20

Figs. 4, 5, and 6 are flow diagrams illustrative of the proposed method, in accordance with a preferred embodiment of the present invention.

## DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENT

A novel method and system for the conduct of public games in a telecommunication network is disclosed. Although the preferred embodiment of the present invention will describe a lottery game organized, controlled and practiced over a cellular communication network by utilizing a known service of the digital cellular networks such as the Short Message Service (SMS) those skilled in the art can appreciate that the present invention is capable of being applied in a variety of networks and protocols and that the present invention applies equally to diverse forms of games. The following description focuses on a specific game in a particular computing and communication environment in order to provide a precise description of the proposed system and method and thereby making possible a thorough understanding of the underlying concepts. No specific details of the following text are meant to be limitations to contemplated implementations of other embodiments and the range and scope of the present invention is meant to be limited by the attached claims only.

A short description of the Short Message Service (SMS) will be given next. The Short Message Service (SMS) is a service for the transmission of short text messages containing up to 160 (when Latin alphabets are used) or up to 70 (when non-Latin alphabets are used) characters to and from cellular phones that use the Global System for Mobile (GSM) communication. SMS messages can be sent and received simultaneously with GSM voice, Data and Fax calls. The text can comprise of words, numbers and alphanumeric combinations. Messages in binary format are also supported.

SMS is a store-and-forward service. SMS messages do not require the target cellular phone to be active and within range and will be held for a predetermined length of time until the target cellular phone is active and within range. SMS messages are transmitted within the same cell or to other cells to users with roaming capability. SMS messages can be sent from one digital phone to another or from a World Wide Web (Web) site. Once an SMS message is sent, it is received by a Short Message Service Center (SMSC). In order to transmit the

message to the appropriate device, the SMSC sends an SMS request to the Home Location Register (HLR) to find the roaming customer. The LHR will return to the SMSC the subscriber's status such as "active", "inactive" and the cell-related location of the subscriber. If the status is "inactive" SMSC will hold the message  
5 for a predetermined length of time. When the subscriber activates the target device, the HLR sends a notification to the SMSC, and the SMSC will attempt delivery of the message in a Short Message Delivery Point to Point format to the serving system. The system pages the target device and if the device responds the message is delivered.

10 SMS features confirmation of message delivery. The SMSC receives verification that the message was received by the end user then classifies the message as "sent" and will not attempt to send again.

The number of cellular phone users is expected to reach 500 million worldwide during the next few years, and it is estimated that with the help of the  
15 SMS, about 75 percent of all cellular phones will be Internet enabled. As cellular phone penetration increases, and practically everyone has a cellular phone, the number of cellular phone-based applications grows in availability and popularity over time. As a result of SMS unique features a wide range of these applications delivered via the SMS. Although at present SMS messages are used typically for  
20 notifications such as notifying a cellular phone owner of a voicemail message, notifying a salesperson of an inquiry and the contact to call, notifying a doctor of a patient with an emergency problem and the like additional applications are being implemented. E-commerce, e-mail, mobile banking, and various information services configured either as "push-based" or "pull-based" and originating from  
25 either a public or private source are becoming widely used in the framework of the SMS service. The information thus delivered comprises share prices, sports scores, weather, flight information, news headlines and the like.

In the preferred embodiment of the present invention users of cellular  
30 phones employing the SMS environment in order to participate in a lottery game.

A text message containing lottery numbers is submitted by a cellular phone user to a short code phone number that is mapped to the SMS Center of a cellular phone operator. The message received by the SMSC is diverted to a gaming server system embedded on a computer platform. The gaming server system contains a lottery game application. The application intercepts and parses the message to establish the identity of the cellular phone user and extract the operative information therein. Next, a lottery transaction, containing the cellular phone's user identification, accounting data and the selection of lottery numbers, is generated and logged. Subsequently the lottery application compiles and sends a message acknowledging the user's selection. The message is re-directed back to the cellular phone with a reverse charging set-up. The application determines the amount charged to the user's phone bill for selecting the lottery numbers. The actual lottery takes places at a predetermined time wherein a lottery drawing module initiates a random drawing of numbers. All the participants receive notification concerning the winning numbers, and indications concerning the results of the individual selection of numbers. The winner or winners are notified in regard to the amounts won, to the various technicalities involved in the winning such as crediting of the appropriate accounts, contact information and the like.

Reference is now made to Fig. 1, which illustrates an exemplary environment wherein the preferred embodiment of the present invention is implemented. Users 10, 12, 14 having communication devices 11, 13, 15 such as cellular phones connect intermittently to a communication network 16 such as a cellular telephone network in order to conduct phone calls. In order to participate in a public game such as a lottery game users 10, 12, 14 activate communication devices 11, 13, 15 and send SMS text messages containing a coded destination number and selected lottery numbers. The message is transmitted via network 16 to Short Message Service Center (SMSC) 18 in the standard manner of SMS text messages. SMSC 18 identifies the message by the destination code number as a

lottery game-related message and therefore diverts the message to a gaming server system 20 embedded on a computing platform.

Referring now to Fig. 2, which illustrate a more detailed view of the various components instituting the environment and the components of an embodiment used for the implementation of the proposed method. Subscriber 10 operates a communication device 11 such as a cellular phone. The cellular phone can be any GSM enabled device having the features necessary for the application of SMS such as the Nokia 2110 or the Nokia 7110 mobile devices manufactured by the Nokia Group, Espoo, Finland. Subscriber 10 submits SMS messages via a cellular communication network to Short Message Service Center (SMSC) 18. SMSC 18 can be a voice mail platform or a stand-alone switching platform such as the Logica, or the MXE, or the Ericsson-a-SMC-c manufactured by Ericsson Corporation of Stockholm, Sweden. The message is identified and suitably diverted by SMSC 18 via a data network 17 such as the Internet via an SMS gateway platform 21 to a gaming server system 20 embedded onto a computer platform connected to data network 17. The message is intercepted and handled by a game application software product 16 such as a lottery game application. Game application 16 transmits a reply message to the subscriber 10 via gateway 21, via data network 17, and via SMSC 18. Subscriber 10 can naturally submit SMS text messages intended to be delivered to other server systems or for other subscribers such as to subscriber 12 having a GSM enabled communication device 13. When subscriber 10 submits a text message intended to be transmitted to subscriber 12 SMSC 19 transmits the target phone number to Home Location Register (HLR) 19 in order to effect the location the requested target phone. HLR 19 locates the target phone and returns subscriber 12 status and location to SMSC 18. Consequently the message is delivered by SMSC 18 to subscriber 12; the message delivery is confirmed and transmitted back to the source phone number where the original message was submitted.

It is important to note that in other embodiments of the present invention different communication devices could be used such as Personal Digital Assistants (PDAs), Web phones, Mobile Data Devices, pagers and the like. Other diverse voice and data communication networks could be employed in the operation of the system such as Local Area Networks (LANs), Wide Area Networks (WANs), Private Branch Exchange (PBX), Virtual Private Networks (VPNs), Proprietary networks and the like.

Fig. 3 illustrates the components of an exemplary gaming server system. Gaming server system 20 consists of communication device 22 such as a network interface card or a modem, input device 24 such as a display terminal and storage device 38 such as a disk device. Storage device 38 stores the various software modules and data structures instituting the lottery game application. The software modules of the lottery game application consists of a registration module 28, a customer transaction handling module 30, a lottery results handling module 32, a lottery drawing module 34, a user interface module 26, and a log module 36. The associated data structures and tables consists of a customers database 40, a customer transaction database 42, a lottery results database 44, a log database 48, and a set of control tables 46. Client 10 sends registration messages, betting transactions and game-related inquiries to gaming server 20. Gaming server 20 replies with confirmation messages, answers to submitted queries and automatic game-related notifications back to client 10. The clients messages and the answers are transmitted via communication device 22. The task of registration module 28 is to register subscribers who request to take part in the game. Registration records are produced using relevant details of subscriber such as personal information, cellular phone number, and the like and inserted into customer database 40. Customer transaction handler module 30 processes the betting transactions of the registered subscribers and inserts the transactions into customer transaction database 43. A transaction could contain fields such as the subscriber's personal information, the selected lottery numbers, indication

regarding the date and time of respective lottery, a timestamp and the like. Lottery drawing module 34 performs the actual lottery. The lottery could be executed automatically by an appropriate system process at predefined time intervals the value of which could be stored in the control tables 46 or could be initiated manually by a user of the gaming server system 38. The user (typically a system administrator or a Webmaster) could activate the execution of the lottery drawing via input device 24. Input device 24 could have a Graphical User Interface (GUI) which will provide the user with a manipulable visual tool set such as graphically simulated buttons, and menus. The performance of the lottery drawing will be effected by suitable GUI instructions effected by the user and sent to the user interface module 26. User interface 26 will translate the GUI instructions into executable commands and call Lottery drawing module 34 in order to initiate the lottery drawing process. The process involves a random generation of numbers and the storing of the numbers into lottery results database 44. Thereafter lottery results handling module 32 will be activated either automatically or manually to examine the accumulated customer transactions relating to the previously executed lottery drawing. Lottery results handling module 32 will scan the customer transactions database 42 and will check the entire set of transactions in order to match the subscriber-selected numbers against the set of random numbers generated in the lottery drawing. The matching process will appropriately flag the transaction records in customer transactions database 42 in order to indicate the status of the selection such as no-win or win. When the examination is completed the entire set of participants is sent notification messages concerning the winning numbers and the results of the individual bets.

It will be easily perceived by one skilled in the art that in other embodiments of the present invention additional modules, routines or tables could be utilized. For example a statistical module could be used to process subscriber related information for the purposes of market research, sales, advertisement, creation of mailing lists and the like.

Fig. 4 illustrates the flow of control in the registration module. At step 50 the registration module parses the message sent by a subscriber and at step 52 the subscriber cellular account number is extracted from the text message. At step 54 the subscriber account, which was created prior to the registration process, is accessed and at step 56 the subscriber data is fetched from the account. The information could contain the caller identification, a subscriber name and the gender thereof. A lottery customer record is built at step 58 and at step 60 the record is inserted into the customer database. At step 62 the registration is established and an appropriate text message is sent as confirmation back to the cellular phone of the new lottery subscriber.

Fig. 5 illustrates the flow of control in the transactions handling module. The gaming application following the interception of a text message from a client 10 of Fig. 3 calls customer transaction module 30 of Fig. 3. At step 66 an intercepted message is parsed and at step 68 an attempt is made to identify the customer originating the message. At 70 it is determined whether the customer identified is a registered lottery subscriber. If no registration record is found at step 74 a predefined response is made by the construction of a suitable text message. The message concerning registration is sent back to the customer originating the transaction. Subsequently at step 90 control returns to the gaming application. If at 70 it is determined that the customer is registered then at step 78 the incoming message is examined, checked for syntax errors, proper formatting and like. If the message is not in a valid format at step 80 a suitable error message is produced and sent. Next, at step 90 control returns to the gaming application. If the message format and content is valid then at step 82 the transaction is properly structured for storage and inserted into the customer transaction database 42 of Fig. 3. At step 84 the call charges are reversed in order to establish the charging of the customer for the reception of the confirmation message. At step 86 a confirmation message is sent to the customer originating the transaction. At step

88 the customer's account is charged for the transaction performed. At step 90 control returns to the gaming application.

Fig. 6 shows the operation of the lottery results handling module 32 of Fig. 3. The results handling module 32 is activated after the performance of the lottery drawing in order to process all the transactions relating to a specific lottery drawing. In the preferred embodiment of the present invention a lottery drawing is identified by a timestamp created at the time of the drawing performance. Therefore all the non-flagged transactions having a reception timestamp with a value below the timestamp of the drawing will be considered relevant to a specific drawing. Results handling module 32 will attempt to match the lottery numbers selected by respective customers in each transaction to the lottery drawing results i.e., the numbers randomly generated by the lottery drawing module 34 of Fig. 3. At step 92 the winning numbers are fetched from the appropriate control tables 46 of Fig. 3. Next at step 94 the first transaction record is read from customer transaction database 42 of Fig. 3. At step 96 the numbers selected by the customer are obtained and compared with the winning numbers. At step 98 it is determined whether all or some numbers match. When no match is found at step 100 the transaction record is flagged as a no-win record. When a match is found at step 98 the transaction record is flagged as a winning record at step 102. At step 104 another transaction record is read from the customer transactions database. As long as there are more transaction records in the database (step 106) the control will perform steps 96 through 106. When all the transactions were processed at step 108 the winning amounts are calculated and at step 110 the values are stored in the control tables 46 of Fig. 3. At 112 all the participants are notified of the winning numbers and the results of the respective individual bets.

The following is a step-by-step description of an exemplary text messaging dialogue concerning customer registration carried out between a cellular phone user and the gaming server system.

1. Cellular phone user:

Sends text message that includes the user Account Number

2. Gaming server:

Verifies caller identification, name and gender based on a  
pre-registration process.

3. Gaming server system:

If user is registered, the system sends a greeting message:

"Mr/Mrs LASTNAME thanks for using the Mobile Lottery system.

Please reply with your six numbers all in two digits (e.g. 02 12 34 35  
44 46)".

4. Gaming server system:

If the user is not registered, the system responds:

"Sorry, but the Mobile Lottery system is not familiar with this account  
number. Please try again or call 020 777 777 777 to establish your  
account."

The following is a step-by-step description of an exemplary text messaging  
dialogue associated with the subscriber's selection of the lottery numbers carried  
out between a cellular phone user and the gaming server system.

1. Cellular phone user:

Selects the lottery numbers and submits a text message.

2. Gaming server system:

If the numbers received are valid the gaming server system responds  
by:

"Mr/Mrs LASTNAME, the numbers you have selected are: XX XX  
XX XX XX XX. To confirm, send "Y". To change send new  
numbers."

3. Gaming server system:

If the syntax of the message is not valid, the system responds with an  
error message, which consists of the following text:

"Mr/Mrs LASTNAME, your response is incorrect please send back your numbers using the following format: e.g. 02 12 34 44 46 48."

4. Cellular phone user:

Responds by sending "Y" or new numbers.

5 5. Gaming server system:

If the user response is "Y" the system sends confirmation message to the user. The message could consist of the following text:

10 "Mr/Mrs LASTNAME, your bet has been accepted. Soon after the dd/mm/yyyy draw you will receive a message with the winning numbers and your score."

6. Gaming server system:

If the user sends new numbers, the system overwrites the previous numbers and repeats stages 2 through 6.

7. Gaming server system:

15 After the lottery drawing, the system sends confirmation of the winning numbers to all the cellular phone users participating in the specific drawing. The message could consist of the following text:

20 "The winning numbers for the Lottery on dd/mm/yyyy were XX XX XX XX XX XX. You guessed 3 of them. Your account will be credited with xxxxx.xx....".

It will be appreciated by persons skilled in the art that the present invention is not limited to what has been particularly shown and described hereinabove. Rather the scope of the present invention is defined only by the  
25 claims which follow.

## WE CLAIM:

1. A method for the conduct of open games in a communication network wherein said communication network includes a plurality of users participating are communicatively connected to at least one central server system, said method comprising the steps of:
  - establishing specific data files within said communication network wherein particular software modules are maintained;
  - submitting messages including user-selected values by said plurality of users participating in said open games to said central server system;
  - transmitting the messages initiated by the plurality of users to the central server system;
  - processing the messages from the plurality of users by said particular software modules in conjunction with said specific data files;
  - storing the processed messages submitted by the plurality of users into the specific data files;
  - establishing a random baseline result in regard to a specific game by generating a set of random values across a substantially larger set of predetermined and preset values;
  - determining a measure of equivalency between said set of randomly generated values and said user-selected values manifested in the messages submitted by the plurality of users;whereby the messages expressing consequential equivalency to the generated set of random values will be symbolically linked to the respective set of randomly generated values.
2. The method of claim 1 further comprises the steps of:
  - establishing signals indicative of the final result of the specific game in conjunction with the totality of said symbolic links between the user-selected values and the set of randomly generated values;

storing said signals indicative of the final result of the specific game into the specific data files;

transmitting suitably structured notifications including signals indicative of the result of the specific game to a plurality of users participating in the specific game.

3. The method of claim 1 wherein the step of processing the messages further comprises the steps of:

processing user information by the particular software modules in conjunction with the messages submitted by the users;

inserting processed user information into the data files as user registration records;

confirming user registration by transmitting to the users a suitably structured confirmation message;

validating the physical and logical structure of the user initiated messages;

acknowledging the users messages by assembling and forwarding a message-confirmation note to the users.

4. The method of claim 1 wherein the step of determining equivalency further comprises the steps of:

reading the set of randomly generated values from the specific data files;

obtaining a user-initiated message from the specific data files;

extracting the user-selected values from said user-initiated messages;

comparing the set of randomly generated values to the user-selected values obtained from the specific data files.

5. The method of claim 1 wherein the step of transmitting messages further comprises the steps of:

directing the user-initiated messages to a telecommunication system-specific switching device;

diverting the user-initiated messages to a gateway device connecting said telecommunication system to a data communication network;

forwarding the user-initiated messages from said gateway device to the central gaming server system.

6. The method of claim 5 wherein the telecommunication system is a cellular telephone network.
7. The method of claim 5 wherein said telecommunication system-specific service is a Short Message System.
8. The method of claim 5 wherein said telecommunication switching device is a Short Message Service Center.
9. The method of claim 5 wherein the data communication network is the Internet.
10. The method of claim 1 wherein the open game is a game of chance.
11. The method of claim 1 wherein the messages submitted by the users are text messages.
12. The method of claim 1 wherein the messages submitted by the users include values utilized as speculative propositions concerning assumed game results.
13. The method of claim 1 wherein the values instituting the randomly generated set of values are numbers expressing lottery drawing results.

14. The method of claim 1 wherein the equivalency or proximity of the random set of values to the set of user-selected values or the lack thereof is indicative of win or no-win states specific to a user participating in a specific game.
15. The method of claim 1 wherein the step of establishing a random baseline result is performed at predetermined temporal intervals.
16. Within a communication network, a system for conducting open games wherein said communication network includes a plurality of users communicatively connected to a central gaming server system, said system comprising:
  - a central gaming server system embedded on a host computer platform for gaming system applications comprising:
    - a communication device to provide for suitable interaction between the gaming server platform and said plurality of users communicatively connected thereto;
    - a storage device to hold the particular software modules and useful data files operative in the performance of the system;
    - a gaming server application for the conduct and management of open games comprising:
      - a user transaction handling module to handle game-related messages transmitted between the plurality of users and the gaming system;
      - a game results handling module to determine the final results of a specific game according to the randomly generated baseline results and to predefined and preset rules stored in the control database;
      - a transaction database to hold the functional elements of the messages transmitted by the users;
      - a game results database to hold the set of game result related information.
17. The system of claim 16 further comprising:

an input device to provide suitable interface for control and maintenance activities performed by the user of the server system.

18. The system of claim 16 wherein said storage device further comprises:
  - a registration software module to handle user-specific information;
  - a user interface module to provide communication among said communication device the plurality of users and the gaming system;
  - a log module to prepare games-related follow-up and historical information;
  - a log database to hold historical game-related information.
  - a user database to hold the personal and the registration-related data of the potential users of the gaming system;
  - a control table designed to hold operative parameters operative in controlling the performance of a specific game..
19. Within a communication network, a method for the conduct of a set of games wherein said communication network includes a plurality of potential participants in said games operating communication devices across said communication network in order to communicatively connect to a central gaming server system, said method comprising the steps of:
  - maintaining functional data structures within said communication network wherein operative software modules instituting a gaming server application are implemented;
  - submitting user-initiated messages including values selected as indicative of an assumed result of said open games by said plurality of game participants to said central gaming server system;
  - delivering the user-initiated messages to the central gaming server system via a series of telecommunication networks;
  - processing said messages received from the plurality of users by said particular software modules in conjunction with said functional data structures;

storing the processed messages submitted by the plurality of users into the specific data structures;

substantiating a random baseline result to a specific game by generating a set of random values across a substantially larger set of predetermined and preset values;

determining equivalency factors of the set of randomly generated values and the user-introduced values introduced in the messages submitted by the plurality of users;

whereby the messages including user-selected values expressing consequential equivalency relationships to the generated set of random values will be connected by proper symbolic links to the respective set of randomly generated values.

20. The method of claim 19 further comprises the steps of:

creating signals indicative of the conclusive results of the specific game in conjunction with the totality of the symbolic links between said user-selected values and the set of randomly generated values;

storing the signals indicative of the conclusive result of the specific game into the specific data structures;

forwarding appropriately assembled messages including signals indicative of the conclusive result of the specific game to a plurality of users participating in the specific game.

21. The method of claim 19 wherein the step of processing the messages further comprises the steps of:

parsing user information by the particular software modules in conjunction with the message submitted by the users;

inserting processed user-related information into the data structures as suitably structured registration records;

authenticating user registration by forwarding suitably structured confirmation messages to the respective users;

validating the physical and logical configuration of the user initiated messages;

acknowledging the user-initiated message by assembling and forwarding message-confirmation notifications to the respective users.

22. The method of claim 19 wherein the step of determining equivalency further comprises the steps of:

obtaining the set of randomly generated values from the specific data structures;

reading a user-initiated message from the specific data structures;

processing the user-initiated messages by extracting relevant values from the messages;

inspecting the set of randomly generated values and the user-selected values obtained from the specific data structures for indications of equivalency;

determining measure of equivalency between the set of randomly generated values to the values extracted from the message submitted by the users.

23. The method of claim 19 wherein the step of transmitting messages further comprises the steps of:

directing the user-initiated messages to a telecommunication system-specific switching device;

diverting the user-initiated messages to a gateway device linking said telecommunication system to a data communication network;

forwarding the user-initiated messages from the gateway device to the central gaming server system.

24. The method of claim 19 wherein the communication system is a cellular telephone network.

25. The method of claim 19 wherein the telecommunication system-specific service is a cellular phone network-specific Short Message System.
26. The method of claim 19 wherein the values submitted within the user-initiated messages are numerical symbols denoting assumed game results.
27. The method of claim 19 wherein the values instituting the randomly generated set of values are numerical symbols expressing specific game results.
28. The method of claim 19 wherein the equivalency or proximity of the random set of values to the set of user-selected values or the lack thereof is indicative of win or no-win user-specific states regarding the specific game.
29. The method of claim 19 wherein a number of games of the same type are conducted concurrently by the central gaming server system.
30. The method of claim 19 wherein different types of games are conducted concurrently by the central gaming server.

1/6

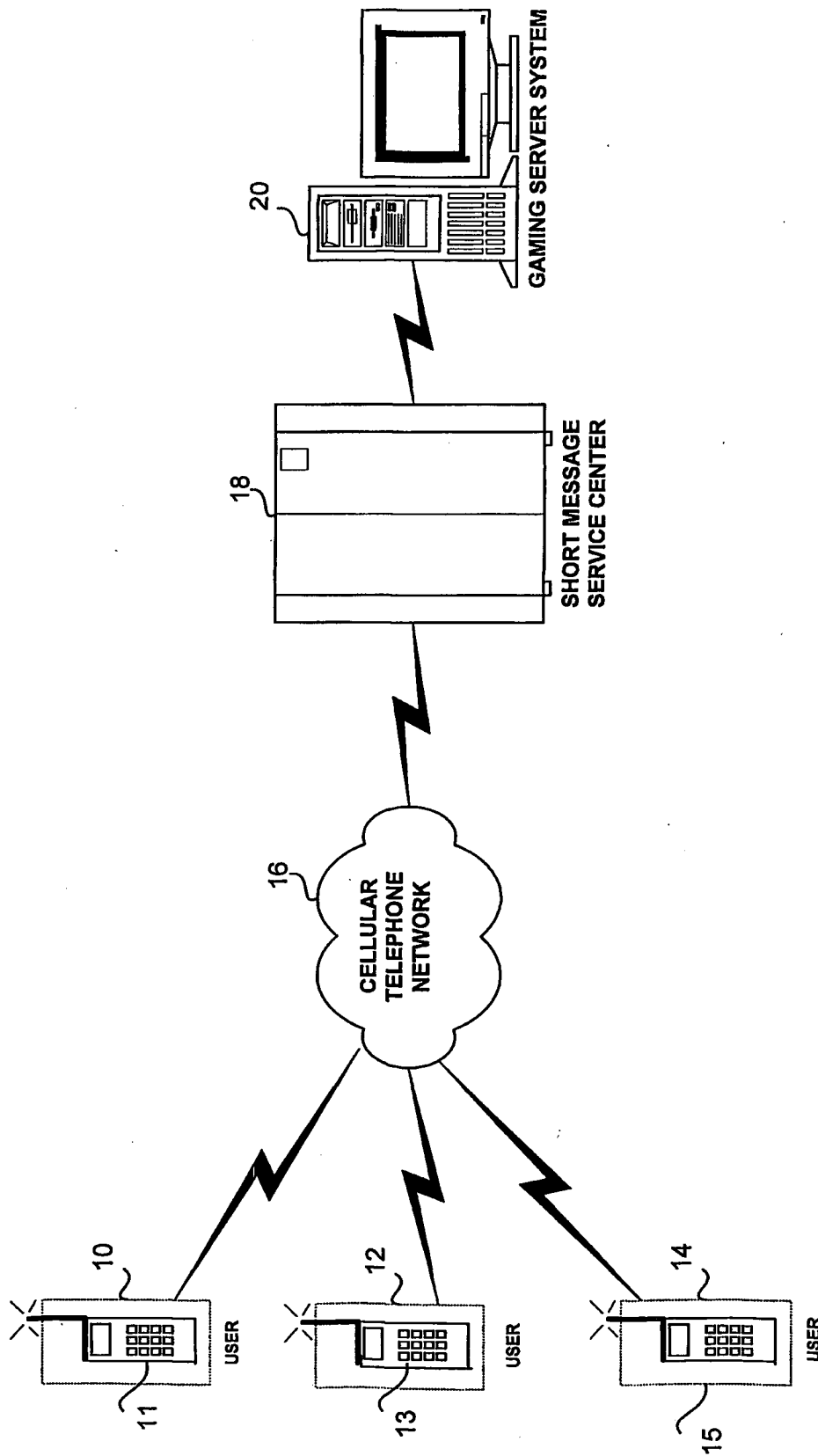


FIG. 1

2/6

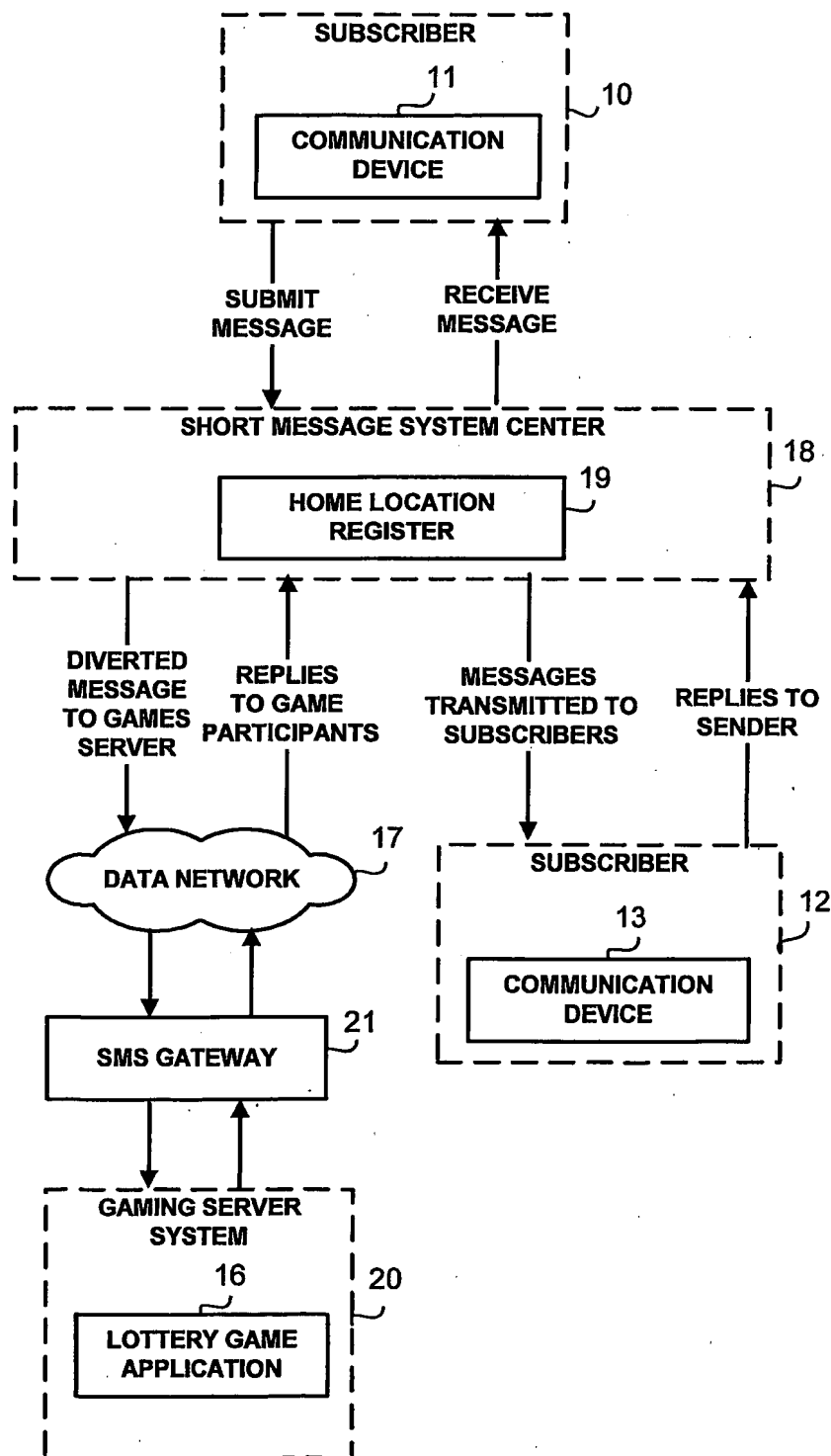


FIG. 2

3/6

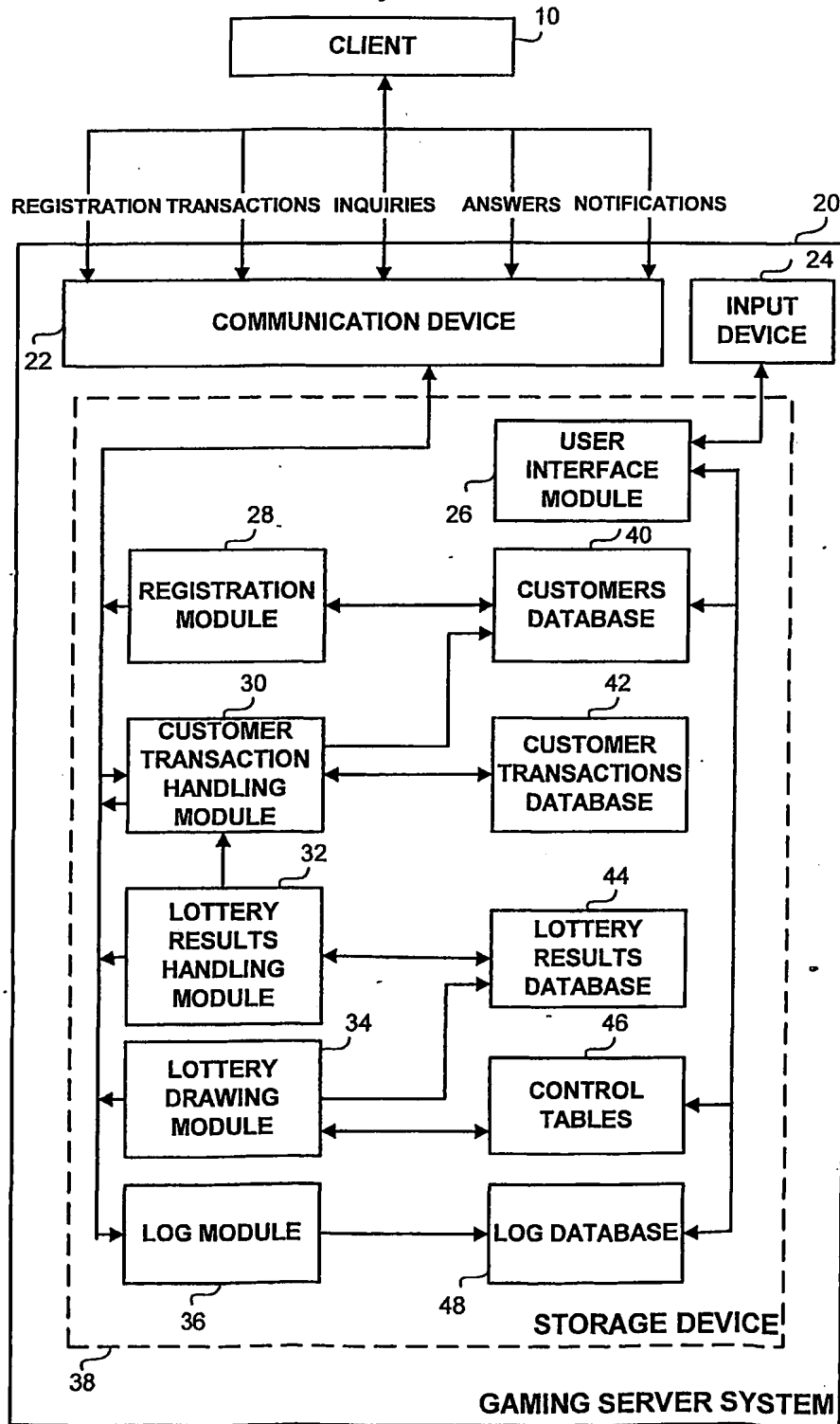


FIG. 3

4/6

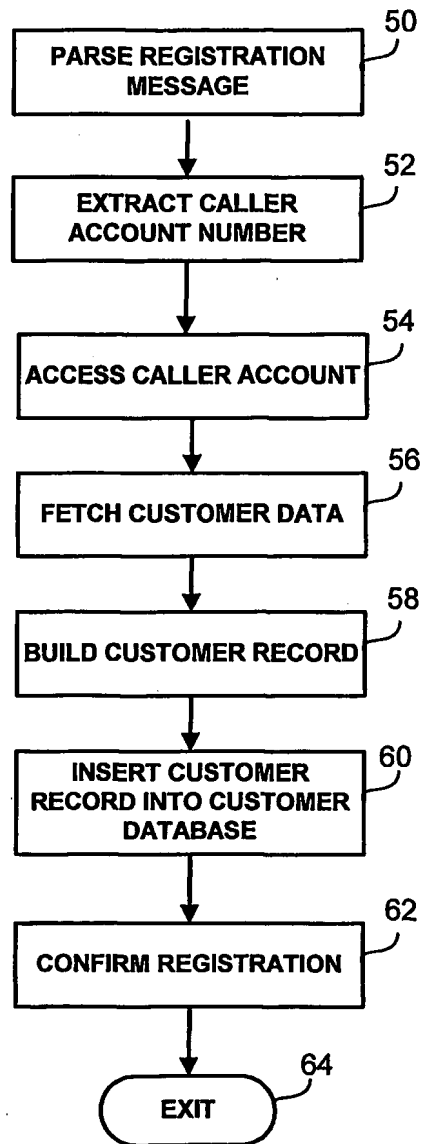


FIG. 4

5/6

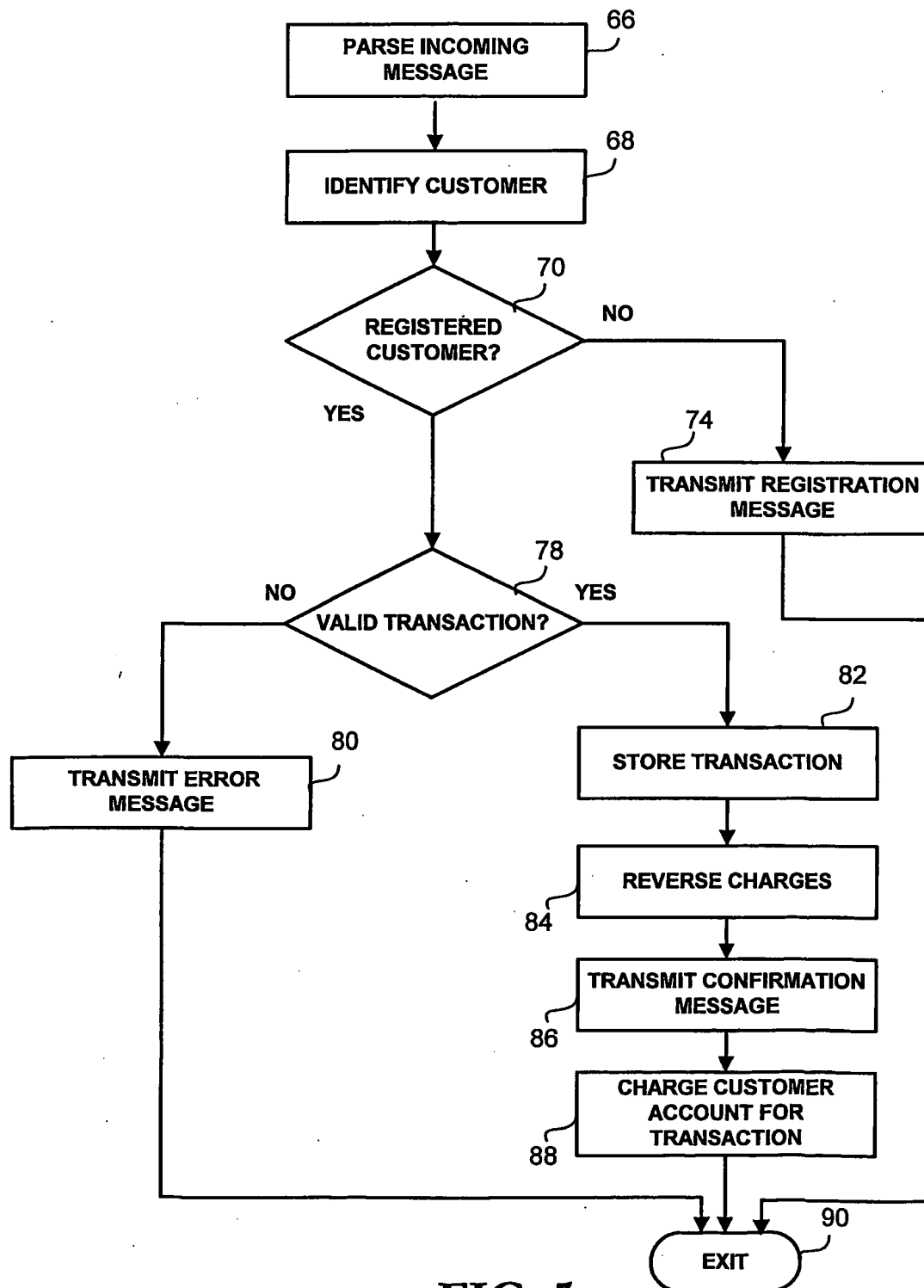


FIG. 5

6/6

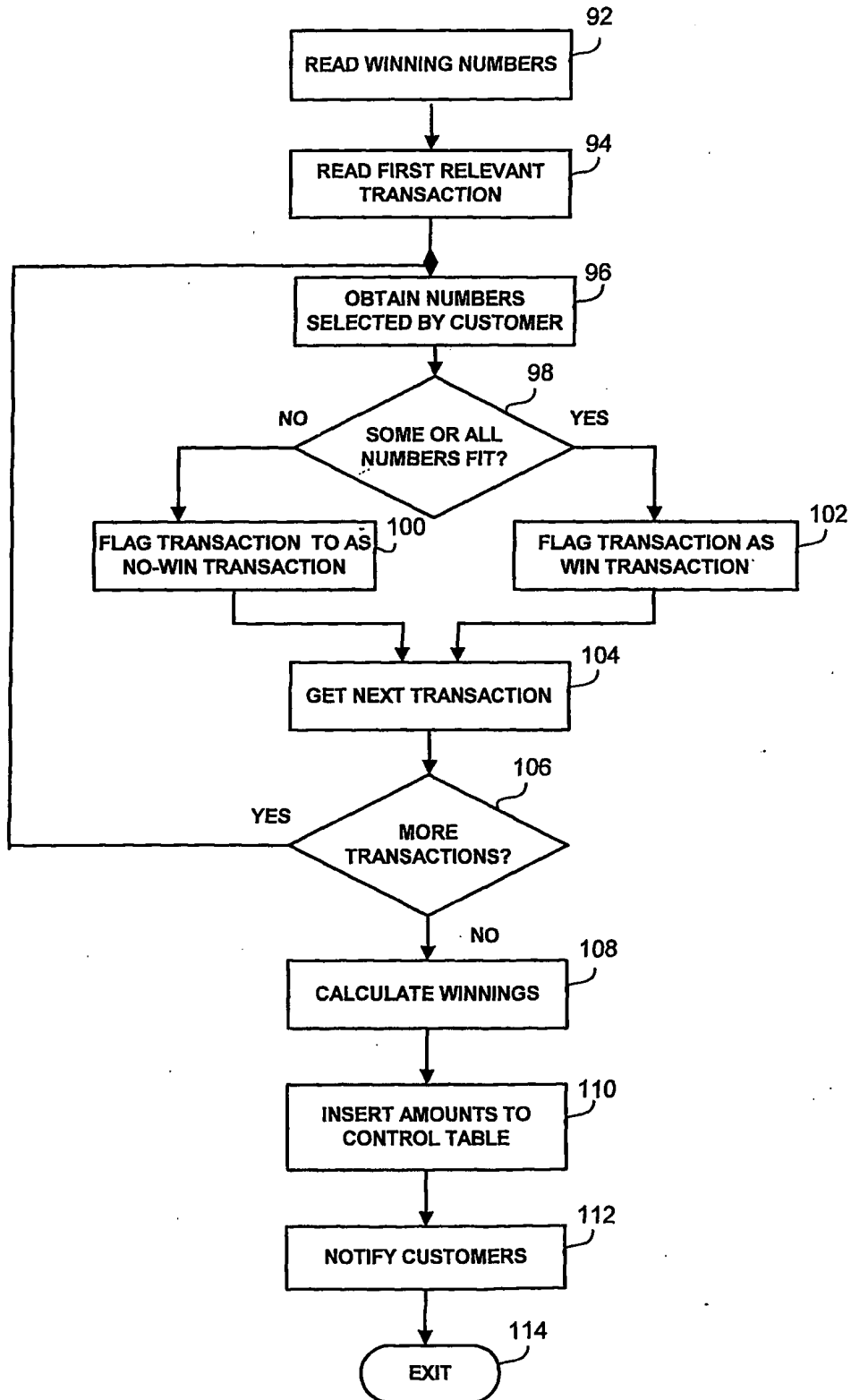


FIG. 6

## INTERNATIONAL SEARCH REPORT

Inter Application No  
PCT/IL 01/00004

A. CLASSIFICATION OF SUBJECT MATTER  
IPC 7 G07C15/00 G07F17/32

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)  
IPC 7 G07C G07F A63F

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	WO 99 42964 A (SWISSCOM AG ;STADELMANN ANTON NIKLAUS (CH)) 26 August 1999 (1999-08-26)  abstract page 1, line 28 -page 3, line 20 page 4, line 32 -page 8, line 20 figure 1	1-3,5-8, 10,11, 13-16, 18-21, 23-30
A	US 6 117 013 A (EIBA PETER) 12 September 2000 (2000-09-12)  abstract column 4, line 7 -column 8, line 2 figures 1,2	1,2, 5-10, 14-16, 19,20, 23-25,28
-/-		

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

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Date of the actual completion of the international search

30 August 2001

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## INTERNATIONAL SEARCH REPORT

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